PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference P35137-P0	FOR FURTHER ACTION	See Form PCT/IPEA/416

International application No. PCT/JP2004/014996	International filing date *(day/month/year)* 05.10.2004	Priority date *(day/month/year)* 11.11.2003

International Patent Classification (IPC) or national classification and IPC

G06F1/00

Applicant

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. et al.

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

   a. ☒ *sent to the applicant and to the International Bureau)* a total of 13 sheets, as follows:

   ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

   ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

   b. ☐ *(sent to the International Bureau only)* a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

   ☒ Box No. I   Basis of the opinion

   ☒ Box No. II   Priority

   ☐ Box No. III   Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

   ☐ Box No. IV   Lack of unity of invention

   ☒ Box No. V   Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

   ☐ Box No. VI   Certain documents cited

   ☐ Box No. VII   Certain defects in the international application

   ☐ Box No. VIII   Certain observations on the international application

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Date of submission of the demand 30.04.2005	Date of completion of this report 18.07.2005
Name and mailing address of the International preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Anticoli, C Telephone No. +49 89 2399-6095

Box No. I	Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

   ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
   ☐ international search (under Rules 12.3 and 23.1(b))
   ☐ publication of the international application (under Rule 12.4)
   ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

   Description, Pages

1-35	as originally filed

   Claims, Numbers

10, 24, 26-35, 39-42	as originally filed
1, 4-9, 11-15, 22, 23, 25, 36-38, 43-46	received on 30.04.2005 with letter of 22.04.2005

   Drawings, Sheets

1/10-10/10	as originally filed

   ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☒ The amendments have resulted in the cancellation of:
   ☐ the description, pages
   ☒ the claims, Nos. 2,3,16-21
   ☐ the drawings, sheets/figs
   ☐ the sequence listing *(specify)*:
   ☐ any table(s) related to sequence listing *(specify)*:

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
   ☐ the description, pages
   ☐ the claims, Nos.
   ☐ the drawings, sheets/figs
   ☐ the sequence listing *(specify)*:
   ☐ any table(s) related to sequence listing *(specify)*:

   * *If item 4 applies, some or all of these sheets may be marked "superseded."*

Box No. II   Priority

1. ☒   This report has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:

    ☐   copy of the earlier application whose priority has been claimed (Rule 66.7(a)).

    ☒   translation of the earlier application whose priority has been claimed (Rule 66.7(b)).

2. ☐   This report has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rule 64.1). Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Box No. V   Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1,4-15,22-46
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1,4-15,22-46
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1,4-15,22-46
	No:	Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The combination of the features of independent claim 1 is neither known from, nor rendered obvious by the available prior art (Article 33 (1) - (3) PCT). The reasons are as follows: none of the documents cited in the search report suggest how to solve the problem of how to control usage of metadata in combination with a content in a flexible manner in order to eg. control type of usage depending on the "sensitivity" of the content.

Independent claims 43, 44 and 46 are the corresponding respective receiving apparatus, transmitting apparatus and computer program product to the method of claim 1 and are therefore new and inventive (Article 33 (1) - (3) PCT) for the same reasons as above.

Claims 4-15, 22-42 are dependent on claim 1 and claim 45 is dependent on claim 43 and as such also meet the requirements of the PCT with respect to novelty and inventive step (Article 33 (1) - (3) PCT).

CLAIMS

1.   (Amended)   A   method   for   judging   use   permission   of information used by one or more terminal apparatuses which use
5   content provided by a content provider and metadata which is data provided by a metadata provider and supplementing the content, the method comprising:

judging use permission of the metadata based on usage control information regarding use control of the metadata; and

10   using the metadata in the case where it is judged that the use of the metadata is permitted in said judging,

wherein the usage control information includes first signer identification information identifying a range of a provider of metadata that can be used,

15   a signature of the metadata provider is included in the metadata,

second signer identification information is included in a public key certificate used for verifying the signature of the metadata, the second signer identification information identifying at least one of

20   the signer of the metadata and the signer of the public key certificate,

in said judging, it is judged whether the metadata use is permitted based on the metadata provider identified in the first signer identification information, the second signer identification

25   information, and the signature verification using the public key certificate, and

the first signer identification information includes information identifying at least one of (i) the signer of the metadata, (ii) the signer of the public key certificate used for the signature verification

30   of the metadata and (iii) no limit.

2.   (Cancelled)

3. (Cancelled)

4. (Amended) The method for judging use permission of information according to Claim 1,

wherein the one or more terminal apparatuses hold the public key certificate used for the signature verification of the metadata signer, and

in said judging, it is judged that the use of the metadata is permitted in the case where (i) the signature verification of the metadata is successful using the public key certificate held by the one or more terminal apparatuses, and (ii) the subject of the public key certificate corresponds with the identification of the first signer identification information.

5. (Amended) The method for judging use permission of information according to Claim 1,

wherein the one or more terminal apparatuses previously hold third signer identification information uniquely identifying the second signer identification information, and

in said judging, it is judged that the use of the metadata is permitted in the case where the third signer identification information corresponds with the second signer identification information.

6. (Amended) The method for judging use permission of information according to Claim 1,

wherein the content includes third signer identification information uniquely identifying the second signer identification information, and

in said judging, it is judged that the use of the metadata is permitted in the case where the third signer identification information corresponds with the second signer identification

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information.

7.   (Amended) The method for judging use permission of information according to Claim 1,

5   wherein the metadata is encrypted,

the one or more terminal apparatuses include an encryption key for decrypting the metadata, and hold a second license for using the metadata,

third signer identification information is included in the
10   second license, the third signer identification information uniquely identifying the second signer identification information, and

in said judging, the use of the metadata is permitted in the case where third signer identification information corresponds with the second signer identification information, the third signer
15   identification information uniquely identifying the second signer identification information included in the second license.

8.   (Amended) The method for judging use permission of information according to Claim 1,

20   wherein the first signer identification information includes third signer identification information uniquely identifying the second signer identification information.

9.   (Amended) The method for judging use permission of
25   information according to Claim 1,

wherein user identification information is included in user metadata. generated by a user in the one or more terminal apparatuses.

30   10.   The method for judging use permission of information according to Claim 9,

wherein for the user metadata, a digital signature is omitted,

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and

in said judging, verification of the signature is omitted.

11.   (Amended) The method for judging use permission of information according to Claim 9,

wherein the user metadata is at least partially encrypted.

12.   (Amended) The method for judging use permission of information according to Claim 11,

wherein the one or more terminal apparatuses hold secret information common to the one or more terminal apparatuses owned by the user, and

the secret information decrypts the user metadata.

13.   (Amended) The method for judging use permission of information according to Claim 1,

wherein the content is encrypted,

the one or more terminal apparatuses include an encryption key for decrypting the content, and hold a first license for using the content, and

the first signer identification information is included in the first license.

14.   (Amended) The method for judging use permission of information according to Claim 1,

wherein the content is encrypted, and

the first signer identification information is included in the encrypted content.

15.   (Amended) The method for judging use permission of information according to Claim 1,

wherein the metadata is encrypted, and

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the first signer identification information includes an encryption key for decrypting the encrypted metadata, and is included in a second license for using the metadata.

5   16.   (Cancelled)

17.   (Cancelled)

18.   (Cancelled)

10

19.   (Cancelled)

20.   (Cancelled)

15   21.   (Cancelled)

22.   (Amended) The method for judging use permission of information according to Claim 1,
wherein the usage control information includes revision
20   permission information indicating revision permission of meta data, and
said method for judging use permission of information further includes judging revision permission of metadata based on the revision permission information.

25

23.   (Amended) The method for judging use permission of information according to Claim 22,
wherein the revision permission information is information identifying whether revision can be permitted or not.

30

24.   The method for judging use permission of information according to Claim 22,

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wherein the revision permission information is identification information which uniquely identifies the metadata.

25. (Amended) The method for judging use permission of information according to Claim 23,

wherein the revision permission information is identification information which identifies the provider of the metadata which can be revised, using the first signer identification information.

26. The method for judging use permission of information according to Claim 22,

wherein the revision permission information is either of terminal identification information which uniquely identifies the one or more terminal apparatuses and user identification information which uniquely identifies a user who uses the terminal apparatuses.

27. The method for judging use permission of information according to Claim 22,

wherein the content is encrypted,

the one or more terminal apparatuses include an encryption key for decrypting the content, and hold a first license for using the content, and

the revision permission information is included in the first license.

28. The method for judging use permission of information according to Claim 22,

wherein the content is encrypted,

the one or more terminal apparatuses include an encryption key for decrypting the content, and hold a first license for using the content, and

the revision permission information is included in the content.

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29. The method for judging use permission of information according to Claim 22,

wherein the metadata is encrypted,

the one or more terminal apparatuses include an encryption

5 key for decrypting the metadata, and hold a second license for using the metadata, and

the revision permission information is included in the second license.

10 30. The method for judging use permission of information according to Claim 22,

wherein the revision permission information is included in the metadata.

15 31. The method for judging use permission of information according to Claim 1,

wherein the usage control information includes control permission information indicating use permission of user metadata generated by a user in the one or more terminal apparatuses, and

20 in said judging, metadata use permission is judged based on the control permission information.

32. The method for judging use permission of information according to Claim 31,

25 wherein the content is encrypted,

the one or more terminal apparatuses include an encryption key for decrypting the content, and hold a first license for using the content, and

the control permission information is included in the first

30 license.

33. The method for judging use permission of information

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according to Claim 31,

     wherein the content is encrypted,

     the one or more terminal apparatuses include an encryption key for decrypting the content, and hold a first license for using the

5 content, and

     the control permission information is included in the content.

34.   The method for judging use permission of information according to Claim 1,

10   wherein the usage control information includes moving range specifying information which specifies moving range of user metadata generated by a user in the one or more terminal apparatuses, and

     in said judging, metadata use permission is judged based on

15 the moving range specifying information.

35.   The method for judging use permission of information according to Claim 34,

     wherein in the case where the moving range specifying

20 information indicates unlimited moving range, the metadata includes user identification information indicating that the metadata is user metadata generated in the one or more terminal apparatuses by a user,

     for the user metadata a digital signature is omitted, and

25   in said judging, in the case where the user identification information is included, verification of the signature is omitted.

36.   (Amended) The method for judging use permission of information according to Claim 34,

30   wherein at least a part of the user metadata generated by the user in the one or more terminal apparatuses is encrypted using an encryption key common to the one or more terminal apparatuses

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owned by the user, and

in said metadata use permission judging, in the case where the moving range specifying information indicates that the moving range is limited to the one or more terminal apparatuses owned by the user, it is judged that the use of the user metadata is permitted in one or more terminal apparatuses which can decrypt the user metadata.

37.   (Amended) The method for judging use permission of information according to Claim 36,

wherein the encryption key common to the one or more terminal apparatuses is secret information common to the one or more terminal apparatuses owned by the user, and

for the user metadata, at least a part of the user metadata is encrypted using the secret information.

38.   (Amended) The method for judging use permission of information according to Claim 34,

wherein the user metadata is assigned with a digital signature of the one or more terminal apparatuses which have generated the user metadata, and

in said metadata use permission judging, the one or more terminal apparatuses which have generated the user metadata are identified.

39.   The method for judging use permission of information according to Claim 34,

wherein the content is encrypted,

the one or more terminal apparatuses include an encryption key for decrypting the content, and hold a first license for using the content, and

the moving range specifying information is included in the

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first license.

40. The method for judging use permission of information according to Claim 34,

5   wherein the content is encrypted,

the one or more terminal apparatuses include an encryption key for decrypting the content, and hold a first license for using the content, and

the moving range specifying information is included in the

10   content.

41. The method for judging use permission of information according to Claim 34,

wherein the metadata is encrypted,

15   the one or more terminal apparatuses include an encryption key for decrypting the metadata, and hold a second license for using the metadata, and

the revision permission information is included in the second license.

20

42. The method for judging use permission of information according to Claim 34,

wherein the metadata is encrypted,

the one or more terminal apparatuses include an encryption

25   key for decrypting the metadata, and hold a second license for using the metadata, and

the revision permission information is included in the metadata.

30   43. (Amended) One or more terminal apparatuses which use content provided by a content provider and metadata which is data provided by a metadata provider and supplementing the content,

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the apparatus comprising:

metadata use permission judging unit operable to judge use permission of the metadata based on usage control information regarding use control of the metadata; and

5   use unit operable to use the metadata in the case where in said metadata use permission judging unit, the use of the metadata is permitted,

wherein the usage control information includes first signer identification information identifying a range of a provider of

10   metadata that can be used,

a signature of the metadata provider is included in the metadata,

second signer identification information is included in a public key certificate used for verifying the signature of the metadata, the

15   second signer identification information identifying at least one of the signer of the metadata and the signer of the public key certificate,

in said judging, it is judged whether the metadata use is permitted based on the metadata provider identified in the first

20   signer identification information, the second signer identification information, and the signature verification using the public key certificate, and

the first signer identification information includes information identifying at least one of (i) the signer of the metadata, (ii) the

25   signer of the public key certificate used for the signature verification of the metadata and (iii) no limit.

44.   (Amended) A transmitting apparatus which transmits, to one or more terminal apparatuses, content provided by a content

30   provider and metadata which is data, provided by a metadata provider, supplementing the content, based on a request, the apparatus comprising

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a means to transmit usage control information regarding use control of the metadata so as to have the one or more terminal apparatuses judge use permission of the metadata,

wherein the usage control information includes first signer

5   identification information identifying a range of a provider of metadata that can be used,

a signature of the metadata provider is included in the metadata,

second signer identification information is included in a public

10   key certificate used for verifying the signature of the metadata, second signer identification information identifying at least one of the signer of the metadata and the signer of the public key certificate,

in said judging, it is judged whether the metadata use is

15   permitted based on the metadata provider identified in the first signer identification information, the second signer identification information, and the signature verification using the public key certificate, and

the first signer identification information includes information

20   identifying at least one of (i) the signer of the metadata, (ii) the signer of the public key certificate used for the signature verification of the metadata and (iii) no limit.

45.   (Amended) A content distribution system comprising

25   the one or more terminal apparatuses according to Claim 43 and the transmitting apparatus according to Claim 44.

46.   (Amended) A program for judging use permission of information on one or more terminal apparatuses which use content

30   provided by a content provider and metadata which is data provided by a metadata provider and supplementing the content, the program causing a computer to execute the following:

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judging use permission of the metadata based on usage control information regarding use control of the metadata; and

using the metadata in the case where in said metadata use permission judging, the use of the metadata is permitted,

5 wherein the usage control information includes first signer identification information identifying a range of a provider of metadata that can be used,

a signature of the metadata provider is included in the metadata,

10 second signer identification information is included in a public key certificate used for verifying the signature of the metadata, the second signer identification information identifying at least one of the signer of the metadata and the signer of the public key certificate,

15 in said judging, it is judged whether the metadata use is permitted based on the metadata provider identified in the first signer identification information, the second signer identification information, and the signature verification using the public key certificate, and

20 the first signer identification information includes information identifying at least one of (i) the signer of the metadata, (ii) the signer of the public key certificate used for the signature verification of the metadata and (iii) no limit.

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